s.

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FILE COVERS 1907 - 20 Oct 2008 VOL 149 ISS 17 FILE LAST UPDATED: 19 Oct 2008 (20081019/ED)

Caplus now includes complete International Patent Classification (IPC) reclassification data for the second quarter of 2008.

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http://www.cas.org/legal/infopolicy.html

=>

Uploading C:\Program Files\Stnexp\Queries\10642438.str

L1 STRUCTURE UPLOADED

=> d

L1 HAS NO ANSWERS L1 STR



Structure attributes must be viewed using STN Express query preparation.

=> s l1 and quaternary?
 REG1stRY INITIATED

Substance data SEARCH and crossover from CAS REGISTRY in progress... Use DISPLAY HITSTR (or FHITSTR) to directly view retrieved structures.

SAMPLE SEARCH INITIATED 14:06:29 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED - 1747 TO ITERATE

100.0% PROCESSED 1747 ITERATIONS SEARCH TIME: 00.00.01

34 ANSWERS

EUL ETLE DROTEGETONG ON THE 440

FULL FILE PROJECTIONS: ONLINE \*\*COMPLETE\*\*
BATCH \*\*COMPLETE\*\*

10/923,271

PROJECTED ITERATIONS: 32433 TO 37447 PROJECTED ANSWERS: 331 TO 1029

L2 34 SEA SSS SAM L1

L3 42 L2

142881 QUATERNARY? L4 0 L3 AND QUATERNARY?

=> s 11 and docusate
 REG1stRY INITIATED
Substance data SEARCH and crossover from CAS REGISTRY in progress...
Use DISPLAY HITSTR (or FHITSTR) to directly view retrieved structures.

SAMPLE SEARCH INITIATED 14:07:12 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED - 1747 TO ITERATE

100.0% PROCESSED 1747 ITERATIONS 34 ANSWERS

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE \*\*COMPLETE\*\*

BATCH \*\*COMPLETE\*\*

PROJECTED ITERATIONS: 32433 TO 37447 PROJECTED ANSWERS: 331 TO 1029

L5 34 SEA SSS SAM L1

L6 42 L5

335 DOCUSATE

L7 0 L6 AND DOCUSATE

=> s l1 and ionic lquid REG1stRY INITIATED

Substance data SEARCH and crossover from CAS REGISTRY in progress... Use DISPLAY HITSTR (or FHITSTR) to directly view retrieved structures.

SAMPLE SEARCH INITIATED 14:07:41 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED - 1747 TO ITERATE

100.0% PROCESSED 1747 ITERATIONS 34 ANSWERS

10/923,271

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE \*\*COMPLETE\*\*

BATCH \*\*COMPLETE\*\*

PROJECTED ITERATIONS: 32433 TO 37447 331 TO PROJECTED ANSWERS: 1029

L8 34 SEA SSS SAM L1

42 L8 L9

> 298217 IONIC 4 LQUID

0 IONIC LQUID

(IONIC(W)LQUID)

L10 0 L9 AND IONIC LQUID

=> s 11 and ionic liquid REG1stRY INITIATED

Substance data SEARCH and crossover from CAS REGISTRY in progress... Use DISPLAY HITSTR (or FHITSTR) to directly view retrieved structures.

SAMPLE SEARCH INITIATED 14:07:57 FILE 'REGISTRY' SAMPLE SCREEN SEARCH COMPLETED - 1747 TO ITERATE

100.0% PROCESSED 1747 ITERATIONS 34 ANSWERS

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE \*\*COMPLETE\*\* BATCH \*\*COMPLETE\*\* PROJECTED ITERATIONS: 32433 TO 37447 PROJECTED ANSWERS: 331 TO

34 SEA SSS SAM L1

L12 42 L11

> 298217 IONIC 850264 LIQUID

> > 4497 IONIC LIQUID

(IONIC(W)LIQUID)

L13 0 L12 AND IONIC LIQUID

=> s 11 and ionic compo? REG1stRY INITIATED

Substance data SEARCH and crossover from CAS REGISTRY in progress...

Use DISPLAY HITSTR (or FHITSTR) to directly view retrieved structures.

SAMPLE SEARCH INITIATED 14:08:20 FILE 'REGISTRY' SAMPLE SCREEN SEARCH COMPLETED - 1747 TO ITERATE

100.0% PROCESSED 1747 ITERATIONS 34 ANSWERS

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE \*\*COMPLETE\*\* BATCH \*\*COMPLETE\*\*

PROJECTED ITERATIONS:

32433 TO 37447 331 TO 1029 PROJECTED ANSWERS:

L14 34 SEA SSS SAM L1

42 L14 L15

> 298217 IONIC 4073012 COMPO?

> > 3077 IONIC COMPO?

(IONIC(W)COMPO?)

0 L15 AND IONIC COMPO? L16

=> s 11 and compo?

REG1stRY INITIATED

Substance data SEARCH and crossover from CAS REGISTRY in progress... Use DISPLAY HITSTR (or FHITSTR) to directly view retrieved structures.

SAMPLE SEARCH INITIATED 14:08:57 FILE 'REGISTRY' SAMPLE SCREEN SEARCH COMPLETED - 1747 TO ITERATE

100.0% PROCESSED 1747 ITERATIONS 34 ANSWERS

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE \*\*COMPLETE\*\*

BATCH \*\*COMPLETE\*\*

32433 TO 37447 331 TO 1029 PROJECTED ITERATIONS: PROJECTED ANSWERS:

L17 34 SEA SSS SAM L1

L18 42 L17

4073012 COMPO?

L19 12 L18 AND COMPO?

=> s 119 and ammonium 431907 AMMONIUM

L20 0 L19 AND AMMONIUM

=> s 119 and py<2002 21968514 PY<2002

L21 10 L19 AND PY<2002

=> d 1-10 ibib abs hitstr

L21 ANSWER 1 OF 10 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1999:367958 CAPLUS

DOCUMENT NUMBER: 131:185603

TITLE: A novel synthesis of a highly heat-resistant

organosilicon polymer using base catalysts

AUTHOR(S): Itoh, Masayoshi

CORPORATE SOURCE: Organic Performance Materials Laboratory, Mitsui

Chemicals, Inc., Yokohama-city, 247-8567, Japan

SOURCE: Catalysis Surveys from Japan (1999), 3(1),

61-69

CODEN: CSURFY; ISSN: 1384-6574 Baltzer Science Publishers

PUBLISHER: Baltzer S
DOCUMENT TYPE: Journal

LANGUAGE: Sourhai English

AB A new highly heat-resistant polymer containing silicon, poly[(phenylsilylene)ethynylene-1,3-phenyleneethynylene] (MSP), was prepared by dehydrogenative coupling polymerization between phenylsilane and 1,3-diethynylbenzene in the presence of base catalysts such as alkaline earth metal oxides, metal hydrides and metal alkoxides. The preparation process, catalytic activities, reaction mechanisms and polymer properties were discussed.

IT 4015-69-4

RL: CAT (Catalyst use); USES (Uses)

(preparation of a highly heat-resistant 1,3-diethynylbenzene-phenylsilane copolymer using base catalysts)

RN 4015-69-4 CAPLUS

CN Aluminate(1-), tetrakis(phenylethynyl)-, lithium, (T-4)- (9CI) (CA INDEX NAME)

● Li+

18 THERE ARE 18 CITED REFERENCES AVAILABLE FOR THIS REFERENCE COUNT: RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L21 ANSWER 2 OF 10 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1992:266214 CAPLUS

DOCUMENT NUMBER: 116:266214

ORIGINAL REFERENCE NO.: 116:44943a,44946a

Methods and compounds for forming alkaline TITLE:

earth metal-containing films Kruck, Thomas; Heck, Stephan Kali-Chemie A.-G., Germany PATENT ASSIGNEE(S):

Ger. Offen., 11 pp. SOURCE:

CODEN: GWXXBX

DOCUMENT TYPE: Patent LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

INVENTOR(S):

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 4121369	A1	19920109	DE 1991-4121369	19910628 <
PRIORITY APPLN. INFO.:			DE 1990-4020976 A1	19900703
OTHER SOURCE(S):	MARPAT	116:266214		

The title methods entail the decomposition of compds. described by the general formulas M(ZR14)2 (I), M(ZR13H)2 (II), or M(ZR12H2)2 (III) (M = Ca, Sr, or Ba, Z = Al, Y, or Sc, and R1 = a linear or branched C1-4 alkyl group or an aryl group, especially a Ph group). The compds. may be applied to a substrate as liqs. or vapors. Selected compds. of those described by the formulas

I, II, and III are claimed.

141646-37-9P ΤТ

RL: SPN (Synthetic preparation); PREP (Preparation)

(preparation and use of, in alkaline earth metal-containing film formation)

141646-37-9 CAPLUS RN

CN Aluminate(1-), tetramethyl-, strontium (2:1), (T-4)- (9CI) (CA INDEX NAME)

 $\bullet$ 1/2 Sr<sup>2+</sup>

L21 ANSWER 3 OF 10 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1989:193346 CAPLUS

DOCUMENT NUMBER: 110:193346

ORIGINAL REFERENCE NO.: 110:32125a,32128a

TITLE: Studies on the reaction of  $\alpha\text{-imino}$  esters with

organometallic compounds

## 10/923,271

AUTHOR(S): Yamamoto, Yoshinori; Ito, Wataru

CORPORATE SOURCE: Fac. Sci., Tohoku Univ., Sendai, 980, Japan

SOURCE: Tetrahedron (1988), 44(17), 5415-23

CODEN: TETRAB; ISSN: 0040-4020

DOCUMENT TYPE: Journal LANGUAGE: English

OTHER SOURCE(S): CASREACT 110:193346

GΙ

AB Benzylzinc reagent reacted with  $\alpha$ -imino ester I at the  $\alpha$ -carbon exclusively, though other organometallic reagents, such as Mg, Al, Cu, Ti, and B derivs., reacted at the nitrogen atom. Use of the (S)-amine as a chiral auxiliary of I created the R chirality at the imino carbon. Very high chiral induction was realized in the reaction of prenylzinc reagent with 8-(-)-phenylmethyl N-(methoxyiino)acetate. The reaction of I with heteroatom-substituted allylic organometallic compds. RCH:CHCH2MLn [R = OMe, MLn = ZnBr, Ti(OCHMe2)3, AlEt3Li; R = OPh, MLn = ZnBr, AlEt3Li; R = SMe, MLn = ZnBr, B(OMe)2] gave the corresponding  $\alpha$ -heteroatom substituted amino acid derivs. II. Here again, the allylic zinc reagent gave the adduct in higher yield than the corresponding Ti, Al, and B reagents.

IT 120169-59-7

RL: RCT (Reactant); RACT (Reactant or reagent) (reaction of, with chiral imino ester, stereochem. of)

RN 120169-59-7 CAPLUS

CN Aluminate(1-), triethyl(3-phenoxy-2-propenyl)-, lithium, (T-4)- (9CI) (CA INDEX NAME)

● Li+

L21 ANSWER 4 OF 10 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1984:86283 CAPLUS

DOCUMENT NUMBER: 100:86283

ORIGINAL REFERENCE NO.: 100:13095a,13098a

TITLE: Composition containing chlorine, bromine,

and magnesium suitable as a polymerization catalyst

PATENT ASSIGNEE(S): Gulf Research and Development Co. , USA

SOURCE: Neth. Appl., 19 pp.

CODEN: NAXXAN

DOCUMENT TYPE: Patent LANGUAGE: Dutch FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATEN	T NO.	KIND	DATE	APPLICATION NO.	DATE
NL 82	01563	A	19831101	NL 1982-1563	19820414 <
PRIORITY A	PPLN. INFO.:			NL 1982-1563	19820414
AB A cat	alyst support	consist	s of MgCl2 d	loped with Br in a mol.	ratio from
1:99	to 50:50 (and	especia	illy from 2.5	5:97.5 to 15:85). Thus	, the reaction
produ	ct of 0.03 mo.	l MgAl2E	t8 [15415-1	[8-6], 0.056 mmol Et2Al	Cl [96-10-6],
and 0.002 mol AlBr3 was further treated with 0.3 mL Et benzoate [93-89-0]					
and s	ubsequently w	ith TiCl	4 to obtain	a catalyst containing	Mg 20.7, Al 0.05,
Ti 0.	8, Br 9.7, and	d Cl 53.	2 weight%.	In the polymerization	of propene, the
catalyst			J		<b>-</b> - ·

had an activity of 112,500 g polymer/g Ti, and the polymer [25085-53-4] had isotacticity 97% and intrinsic viscosity 3.7 dL/g (ASTM D-2857).

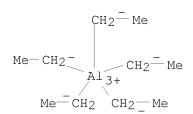
ΙT 82404-69-1

RL: USES (Uses)

(catalyst compns. containing, for stereospecific polymerization of alkenes)

RN 82404-69-1 CAPLUS

CN Aluminate (2-), pentaethyl-, magnesium (1:1) (CA INDEX NAME)



• Mq 2+

L21 ANSWER 5 OF 10 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1983:216200 CAPLUS

DOCUMENT NUMBER: 98:216200

ORIGINAL REFERENCE NO.: 98:32893a,32896a

TITLE: Composition containing chlorine, bromine and

magnesium

INVENTOR(S): Beach, David L.; Zambelli, Adolfo

PATENT ASSIGNEE(S): Gulf Research and Development Co. , USA

SOURCE: U.S., 8 pp.

CODEN: USXXAM

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 4366086	A	19821228	US 1980-221064	19801229 <
JP 58183707	A	19831027	JP 1982-56777	19820407 <
PRIORITY APPLN. INFO.:			US 1980-221064	19801229

AB A support for Ziegler catalysts exhibiting high polymer yields and a high degree of stereospecificity is obtained by treating an organo Mg compound with a mixture of chlorinated and brominated Al compds. to give a composition having 1:90-50:50 Br-Cl mol ratio and 1:1.6-1:2 Mg-halogen mol ratio. Thus, a solution of 0.03 mol MgAl2Et8 [15415-18-6] in 150 mL heptane was treated with a solution containing 0.056 mol Et2AlCl [96-10-6] and 0.002 mol AlBr3 in 50 mL heptane for 6 h under reflux to give a precipitate containing Mg 20 ,

Al 0.1, Cl 47.3, and Br 13.1%. The precipitate was treated with EtOBz in heptane  $\,$ 

at 70° for 4 h, then with TiCl4 at 140° for 3 h to give a catalyst containing Mg 20.7, Al 0.05, Ti 0.8, Br 9.7 and Cl 53.2%. Polymn of propylene using the catalyst and Et3Al [97-93-8] gave isotactic polypropylene [25085-53-4] with intrinsic viscosity 3.7 dL/g and isotacticity 97%. Polymer yield was 112,500 g polymer/g Ti.

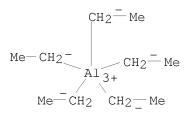
IT 82404-69-1

RL: CAT (Catalyst use); USES (Uses)

(catalysts, for polymerization of propylene)

RN 82404-69-1 CAPLUS

CN Aluminate(2-), pentaethyl-, magnesium (1:1) (CA INDEX NAME)



● Mg 2+

L21 ANSWER 6 OF 10 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1975:479316 CAPLUS

DOCUMENT NUMBER: 83:79316

ORIGINAL REFERENCE NO.: 83:12459a,12462a

TITLE: Reaction of alkaline earth metals with organomercury

compounds in the presence of aluminumtrialkyls

and aluminumtriaryls

AUTHOR(S): Ivanov, L. L.; Zavizion, S. Ya.; Zakharkin, L. I.

CORPORATE SOURCE: Inst. Elementoorg. Soedin., Moscow, USSR SOURCE: Zhurnal Obshchei Khimii (1975), 45(5),

1060-5

CODEN: ZOKHA4; ISSN: 0044-460X

DOCUMENT TYPE: Journal LANGUAGE: Russian

AB The aluminum compds. M(AlR3R1)2 (R = Et, Pr, Ph; R1 = Et, Pr, Ph, MeC6H4; M = Ca, Sr, Ba) were prepared by the reaction of AlR3 with HgR12 and M, with or without solvents (Et2O, THF, Me3N etc.). In the presence of solvents,

the solvated products  $M(AlR3R1)2 \cdot nL$  (n = 2,3,4,6; L = solvent) were

formed.

IT 56413-54-8P

RL: SPN (Synthetic preparation); PREP (Preparation)

(preparation of)

RN 56413-54-8 CAPLUS

CM 1

CRN 56413-53-7 CMF C8 H20 Ca O2

CCI CCS

CM 2

CRN 14913-44-1 CMF C8 H20 Al CCI CCS

$$_{\mathrm{Me}}^{-}$$
  $_{\mathrm{CH}_{2}}^{-}$   $_{\mathrm{Me}}^{\mathrm{CH}_{2}}$   $_{\mathrm{CH}_{2}}^{-}$   $_{\mathrm{Me}}^{\mathrm{Me}}$   $_{\mathrm{CH}_{2}}^{-}$   $_{\mathrm{Me}}^{\mathrm{CH}_{2}}$   $_{\mathrm{CH}_{2}}^{\mathrm{Me}}$ 

L21 ANSWER 7 OF 10 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1970:132840 CAPLUS

DOCUMENT NUMBER: 72:132840 ORIGINAL REFERENCE NO.: 72:23791a

TITLE: Reactions of methyl isocyanide with aluminum

compounds

AUTHOR(S): Meller, Anton; Batka, H.

CORPORATE SOURCE: Inst. Anorg. Chem., Tech. Hochsch. Wien, Vienna,

Austria

Monatsh. Chem. (1970), 101(2), 627-8 SOURCE:

CODEN: MOCHAP

DOCUMENT TYPE: Journal LANGUAGE: German

GΙ For diagram(s), see printed CA Issue.

AΒ Me3Al.C.tplbond.NMe was obtained by treatment of Me3Al with MeN.tplbond.C. It ignited spontaneously in both air and water. Treatment of AlC13 with MeN.tplbond.C gave 20% (C6H9AlCl3N3)2 which had a cyclic structure (I).

ΙT 27681-26-1P

> RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of)

27681-26-1 CAPLUS RN

Aluminum, [(isocyano- $\kappa$ C)methane]trimethyl-, (T-4)- (9CI) (CA INDEX CN NAME)

$$-H_3C-A1 \xrightarrow{CH_3} C \xrightarrow{-} N^+ Me$$

L21 ANSWER 8 OF 10 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1965:498485 CAPLUS

DOCUMENT NUMBER: 63:98485

ORIGINAL REFERENCE NO.: 63:18132g-h,18133a

TITLE: Reactions of organoaluminum compounds with

acyl peroxides and anhydrides

AUTHOR(S): Razuvaev, G. A.; Stepovik, L. P.

CORPORATE SOURCE: State Univ., Gorki

SOURCE: Zhurnal Obshchei Khimii (1965), 35(9),

1672-6

CODEN: ZOKHA4; ISSN: 0044-460X

DOCUMENT TYPE: Journal Russian

A mixture of (iso-PrO)3Al and 1 mole m-O2NC6H4CO2Ac in C6H6 under N gave, after evaporation and treatment with aqueous KOH, .apprx.10-12% AcOH, but m-O2NC6H4CO2CMe:CH2 was not isolated. Similarly C1CH2CO2Ac gave C1CH2CO2H; o-O2NC6H4CO2Ac gave AcOH (4%) in 10-15 min. EtAl(OEt)2 and 1 mole Bz202 in C6H6 under N gave in 3-4 days AcH, Bz0Et, and Bz0A1(OEt)2; similar treatment with BzO2Ac gave AcOH. The reaction of (iso-PrO)3Al with mixed acid anhydrides gave the alkoxy-Al salts of the stronger acid and an ester of the weaker acid. (EtO)2AlEt and acyl peroxides gave esters and alkoxy-Al salts of carboxylic acids. Both reactions appear to proceed through a complex formed at the Al atom with the O bridge of the anhydrides or 2 0 atoms of the peroxides.

68446-25-3P, Sodium tetrakis(phenylethynyl)aluminate

700798-30-7P, Aluminate, tetrakis(phenylethynyl)-744953-02-4P, Aluminate, tetra-1-hexynyl-

RL: PREP (Preparation)

(preparation of)

68446-25-3 CAPLUS RN

CN Aluminate(1-), tetrakis(phenylethynyl)-, sodium, (T-4)- (9CI) (CA INDEX

$$\begin{array}{c}
C = C - Ph \\
C = C - Ph
\end{array}$$

$$\begin{array}{c}
C = C - Ph \\
C = C - Ph
\end{array}$$

$$\begin{array}{c}
C = C - Ph
\end{array}$$

● Na+

RN 700798-30-7 CAPLUS

CN Aluminate(1-), tetrakis(phenylethynyl)-, (T-4)- (9CI) (CA INDEX NAME)

$$\begin{array}{c}
C = C - Ph \\
Ph - C = C - 3 + | C = C - Ph \\
| C = C - Ph
\end{array}$$

744953-02-4 CAPLUS RN

Aluminate(1-), tetra-1-hexynyl-, (T-4)- (9CI) (CA INDEX NAME) CN

L21 ANSWER 9 OF 10 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1963:448453 CAPLUS

DOCUMENT NUMBER: 59:48453 ORIGINAL REFERENCE NO.: 59:8772e-q

Synthesis of complex aluminum acetylides TITLE:

MAl(C.tplbond.CR) 4, where M = Li, Na, or K, and their

reactions with carbonyl compds.

Zakharkin, L. I.; Gavrilenko, V. V. AUTHOR(S):

Izvestiya Akademii Nauk SSSR, Seriya Khimicheskaya ( SOURCE:

1963), (6), 1146-7 CODEN: IASKA6; ISSN: 0002-3353

DOCUMENT TYPE: Journal LANGUAGE: Unavailable

AΒ The reaction MAlH4 + 4HC.tplbond.CR  $\rightarrow$  MAl(C.tplbond.CR)4 + 4H2

(where R = alkyl, aryl, or H) can be carried out with NaAlH4 or KAlH4 as

well as with LiAlH4. With M = Li or Na, the reaction took place readily in tetrahydrofuran, while diglyme was the best solvent for the reaction with Li compds. Carbonyl compds. also reacted with the complex Al acetylides: MAl(C.tplbond.CR)4 + :CO  $\rightarrow$  :C(OH)C.tplbond.CR. Thus, MAl(C.tplbond.CPh)4 (M = Li, Na, K) and PhCHO formed PhC.tplbond.CCH(OH)Ph (70-80% yield); NaAl(C.tplbond.CBu)4 and PrCHO formed BuC.tplbond.CCH(OH)Pr (70%); NaAl(C.tplbond.CBu)4 and crotonaldehyde formed MeCH:CHCH(OH)C.tplbond.CBu (80%); while NaAl(C.tplbond.CH)4 and butyraldehyde, PhCHO, or phenylacetone formed the corresponding acetylenic alcs. with yields of 40-50%,. At elevated temps., carboxylic acids could be prepared with good yields by the reaction MAl(C.tplbond.CR)4 + CO2  $\rightarrow$  RC.tplbond.CCO2H. On passing CO2 through a solution of NaAl(C.tplbond.CPh)4 in diglyme at 120-50°, 60% phenylpropiolic acid was obtained.

IT 4015-69-4P, Lithium tetrakis(phenylethynyl)aluminate 68446-25-3P, Sodium tetrakis(phenylethynyl)aluminate 700798-30-7P, Aluminate, tetrakis(phenylethynyl)-744953-02-4P, Aluminate, tetra-1-hexynyl-RL: PREP (Preparation)

(preparation of) RN 4015-69-4 CAPLUS

CN Aluminate(1-), tetrakis(phenylethynyl)-, lithium, (T-4)- (9CI) (CA INDEX NAME)

● Li+

RN 68446-25-3 CAPLUS

CN Aluminate(1-), tetrakis(phenylethynyl)-, sodium, (T-4)-(9CI) (CA INDEX NAME)

$$\begin{array}{c} - \\ C = C - Ph \\ Ph - C = C - \frac{3+}{A1} - C = C - Ph \\ - \\ C = C - Ph \end{array}$$

Na<sup>+</sup>

RN 700798-30-7 CAPLUS

CN Aluminate(1-), tetrakis(phenylethynyl)-, (T-4)- (9CI) (CA INDEX NAME)

RN 744953-02-4 CAPLUS CN Aluminate(1-), tetra-1-hexynyl-, (T-4)- (9CI) (CA INDEX NAME)

L21 ANSWER 10 OF 10 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1963:53473 CAPLUS

DOCUMENT NUMBER: 58:53473

ORIGINAL REFERENCE NO.: 58:9135h,9136a-b

TITLE: Organometallic reactions

INVENTOR(S): Kobetz, Paul; Pinkerton, Richard C.

PATENT ASSIGNEE(S): Ethyl Corp.

SOURCE: 4 pp. DOCUMENT TYPE: Patent LANGUAGE: Unavailable

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

solid.

а

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 3068261		19621211	US 1960-5593	19600201 <
PRIORITY APPLN. INFO.	:		US	19600201
AB Alkali metal Al	nydrocarbo	n complexes	(I) are prepared by tre	eating the
corresponding B	complexes	with an Al t	rihydrocarbon compound	Thus, a
stirred mixture	of NaBEt4	(II) 150 (1	mole) and AlEt3 (III) 2	228 parts (2
moles) is heated	to 125° t	o give volat	ile BEt3 (IV) and a res	sidue
consisting of eq	uimolar pr	oportions of	III and NaAlEt4 (V).	By cooling
the mixture to re	oom temper	ature, V is	crystallized as a read:	ily filterable

Similarly are prepared (B reactant, moles, Al reactant, moles, I product, and B trihydrocarbon product given): LiBEt4, 1, III, 3, LiAlEt4, IV; II, 1, AlMe3, 1, NaAlMe3Et, IV; II, 1, AlMe3, 3, V, BMe3; NaBPr4, 1, III, 2, NaAlEt3Pr, BEt3-iso Pr compds.; NaBPh4, 1, Al(iso-Bu)3, 1, mixture of NaAliso-Bu-Ph compds., BPh3 + B(iso-Bu)3; KBEt4, 1, AlPr3, 1, KAlEtPr3, IV; NaB(CH2Ph)4, 1, AlPh3, 1, NaAlPh3(CH2Ph), B(CH2Ph)3. The reaction can be utilized for the selective separation of organometallic mixts. which include Al trihydrocarbon compds. as a component. Thus, a single phase liquid mixture of 42% PbEt4 (VI) and 58% III 1000 (the mixture also containing

RN

fraction of 1% of a thermal stabilizer for VI) is treated with II 760 parts at 100° with vigorous agitation to give vaporized IV and a mixture of immiscible V and VI. I are useful as alkylating agents in producing organo-metallic compds. of other metals and as electrolyte components for electrolytic processes. The B trihydrocarbon materials released in the process are valuable as components of high energy fuel compns.

IT 701193-48-8P, Aluminate, ethyltrimethylRL: PREP (Preparation)

: PREP (Preparation
 (preparation of)

701193-48-8 CAPLUS

CN Aluminate(1-), ethyltrimethyl-, (T-4)- (CA INDEX NAME)